



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/703,977	11/07/2003	Carlos R. Corleto	COS-928	2841
7590 David J. Alexander Fina Technology, Inc. P.O. Box 674412 Houston, TX 77167-4412				
EXAMINER				
AFZALL SARANG				
ART UNIT		PAPER NUMBER		
3726				
MAIL DATE		DELIVERY MODE		
03/30/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* CARLOS R. CORLETO and JOSE M. SOSA

---

Appeal 2009-002933  
Application 10/703,977  
Technology Center 3700

---

Decided: March 29, 2010

---

Before: WILLIAM F. PATE III, MICHAEL W. O'NEILL, and  
KEN B. BARRETT, *Administrative Patent Judges*.

PATE III, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from the final rejection of claims 1 to 51. We have jurisdiction under 35 U.S.C. § 6.

The claimed invention is directed to a method for making a devolatilizer nozzle. Claim 1, reproduced below, is further illustrative of the claimed subject matter.

1. A method comprising:  
  
    performing a steel plate;  
  
    forming a devolatilizer nozzle from said steel plate;  
  
    heat treating said devolatilizer nozzle; and  
  
    passing a volatile component through the perforations in the devolatilizer nozzle.

#### REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Nakagawa	US 6,007,761	Dec. 28, 1999
Yamada (as translated)	JP 64 047878	Feb. 22, 1989

#### REJECTIONS

Claims 1-3, 26-28, 50, and 51 stand rejected under 35 U.S.C. § 102 as anticipated by Yamada.

Claims 4-15, 19-21, 23-25, 29-40, and 44-49 stand rejected under 35 U.S.C. § 103 as unpatentable over Yamada.

Claim 22 stands rejected under 35 U.S.C. § 103 as unpatentable over Yamada in view Nakagawa.

Claims 1-21 and 23-51 stand rejected under 35 U.S.C. § 103 as unpatentable over the Appellants' admitted prior art in view of Yamada.

Claim 22 stands rejected under 35 U.S.C. § 103 as unpatentable over of appellant's admitted prior art in view of Yamada and Nakagawa.

### ISSUES

With respect to the 35 U.S.C. § 102 rejection based on Yamada, Appellants argue that the method of Yamada does not form a devolatilizer nozzle. The Appellants further argue that Yamada does not pass a volatile component through the perforations in the nozzle as required by claim 1. Appellants state that Yamada does not disclose heat treatment of the devolatilizer nozzle to increase the strength thereof. Rather, according to Appellants, Yamada teaches the heat treatment to precipitate TiC as a coating for corrosion resistance. Accordingly, the first issue for our consideration is whether the subject matter of claims 1-3, 26-28, 50, and 51 lack novelty over the process disclosed in Yamada.

With respect to the rejection of claims 4-15, 19-21, 23-25, 29-40, and 44 through 49 under § 103, these claims are directed to details of Appellants' claimed process such as the yield and tensile strength of the steel, size of the holes, and thickness of the plate. The Examiner acknowledges that these details are not disclosed or taught in Yamada. The Examiner states that he has taken official notice that these features are known in the prior art. The Examiner further states that the Appellants have not timely traversed the Examiner's assertion. Therefore, according to the Examiner, the Appellants have admitted that these details are prior art. Accordingly, the second issue for consideration is whether the Appellants have admitted that these features are prior art or not.

With respect to the rejection of claim 22 as unpatentable over Yamada in view of Nakagawa, the issue is whether the Examiner erred in determining that it would have been obvious to anneal the nozzle of Yamada as taught by Nakagawa.

With respect to the rejection of claims 1-21 and 23-51 under the admitted prior art and Yamada, the issue again is whether the Appellants have admitted that the various details claimed in the dependent claims are prior art.

The final issue is whether the admitted prior art, Yamada and Nakagawa render the step of annealing the nozzle prima facie obvious.

#### ANALYSIS

In our view, the subject matter of claim 1 lacks novelty over the working example disclosed in paragraphs [0017]-[0025] of Yamada. With respect to method claims, it is well settled that, absent claim language requiring the steps of a method claim to be performed in a specific order, it is improper to require the steps to be performed in the order listed. *See Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1342-43 (Fed. Cir. 2001). In this regard, the Federal Circuit has stated:

Unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one. *See Loral Fairchild Corp. v. Sony Corp.*, 181 F.3d 1313, 1322, (Fed. Cir. 1999) (stating that "not every process claim is limited to the performance of its steps in the order written"). However, such a result can ensue when the method steps implicitly require that they be performed in the order written. *Id.*

Accordingly, Yamada teaches forming a nozzle body 1 by forming a round recess in a steel plate. See para. [0018]. Next the steel plate is

perforated. *Id.* The perforations and the steel plate undergo vapor deposition wherein volatile components such as plasmas are passed through the perforations. See para. [0019]-[0022]. Finally, the nozzle is heat treated. See para. [0023]. As can be seen, Yamada teaches all the steps of the method of claim 1.

Appellants argue that the nozzle constructed by the method of Yamada is not a devolatilizer nozzle. However, the Examiner has made the finding that the structure of the claimed subject matter is indistinguishable from the structure produced by Yamada at least to the scope of the claims. See Answer at 4. Therefore, it is our view that the Examiner has satisfied his or her burden of establishing an anticipatory method in the first instance, and the burden has shifted to Appellants to establish that the subject matter of Yamada is distinct from the claimed devolatilizer nozzle. Appellants' argument that Yamada's structure is not a devolatilizer nozzle, without more evidence, is insufficient to satisfy Appellants' burden on this point.

Furthermore, the Examiner has made the finding that the ion-containing plasma in the vapor deposition chamber satisfies the claimed step of passing a volatile component through the perforations. Appellants' conclusory statement that this is not the case is not supported by any evidence or argument. We note Appellants' argument that the heat treating of Yamada is not for the purpose of strengthening the nozzle. However, "strengthening" of the nozzle does not appear in claim 1. Therefore, based on these subsidiary findings of fact it is our finding that claims 1-3, 26-28, 50, and 51 lack novelty over Yamada.

Turning to the rejection of claims 4-15, 19-21, 23-25, 29-40, and 44-49 as unpatentable over Yamada, we will not sustain this rejection.

While admissions made by Appellants in a specification or during patent prosecution may be binding prior art, admissions must be clear and unmistakable. *See Issidorides v. Ley*, 4 USPQ2d 1854, 1859 (Board Patent Appeals & Interferences 1985).

In this instance, it appears that Appellants have consistently argued that the details with respect to yield strength, tensile strength, type of steel used, perforations size, and thickness of the plate were not known in the prior art. Therefore, in our view, the Appellants have never fully conceded that these matters that the Examiner took Official Notice of, were actually in the prior art. It appears that Appellants have cited three Patents in the Specification that contain some details regarding prior art devolatilizers. However, the Examiner has not applied this prior art. Thus, since Appellants have not admitted these features are prior art, they cannot form a proper basis for a § 103 rejection when combined with Yamada.

The same result holds true with respect to the § 103 rejection based on what the Examiner has termed the admitted prior art. Thus, the rejection of claims 1-21 and 23-51 based on the so-called admitted prior art cannot be sustained.

Turning to consideration of claim 22, we will reverse the two rejections of this claim. In our view, the Examiner has not given articulated reasoning with rational underpinnings as to why one of ordinary skill would be led to anneal the nozzle of Yamada after the heat treatment. We find that an annealing step in the process of Yamada is entirely unpredictable. Therefore, one of ordinary skill would not be led to use the known annealing technique, inasmuch as the result thereof would not have been predictable.

### CONCLUSION

It is our conclusion that the Examiner did not err in rejecting Claims 1-3, 26-28, 50, and 51 under 35 U.S.C. § 102 as anticipated by Yamada.

The Examiner did err in rejecting Claims 4-15, 19-21, 23-25, 29-40, and 44-49 under 35 U.S.C. § 103 as unpatentable over Yamada.

The Examiner did err in rejecting Claim 22 under 35 U.S.C. § 103 as unpatentable over Yamada in view Nakagawa.

The Examiner did err in rejecting Claims 1-21 and 23-51 under 35 U.S.C. § 103 as unpatentable over the Appellants' admitted prior art in view of Yamada.

The Examiner did err in rejecting Claim 22 under 35 U.S.C. § 103 as unpatentable over of Appellants' admitted prior art in view of Yamada and Nakagawa.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). See 37 C.F.R. § 1.136(a)(1)(iv) (2009).

### AFFIRMED IN PART

Vsh

DAVID J. ALEXANDER  
FINA TECHNOLOGY, INC.  
P.O. BOX 674412  
HOUSTON TX 77167-4412